



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,838	04/24/2007	Achim Hilgers	AT04 00009 US1	3680
65913 7590 01/02/2008 NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER DUONG, DIEU HIEN	
			ART UNIT 2821	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,838	HILGERS, ACHIM	
	Examiner	Art Unit	
	Dieu Hien T. Duong	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

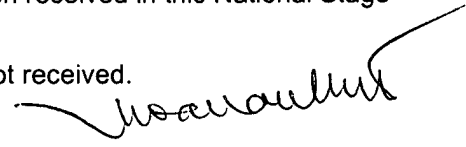
Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Hoanganh Le
Primary Examiner

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/17/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

This Office Action is a response to Applicant's Preliminary Amendment filed on August 17, 2006. In virtue of this communication, claims 1-9 are currently presented in the instant application.

Priority

1. Acknowledgement is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on August 17, 2006 in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is considered by the examiner.

If applicant is aware of any prior art or any other co-pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.97 to disclose the same.

Drawings

3. The drawing submitted on August 17, 2006 is accepted as part of the formal application.

Specification

4. The disclosure is objected to because of the following informalities:

In page 1 of specification, after the title, the paragraph "This application is a National Stage application of PCT application No. PCT/IB05/50577 filed February 15, 2005" should be inserted.

Appropriate correction is required.

Claim Objections

5. Claim 5 is objected to because of the following informalities:

Claim 5, line 2, "ore" should be changed to - -or- -;

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the recitation "the antenna has a single connection to ground" is unclear. It is not clear that the "ground" in line 2 of claim 3 is the same or difference from the ground in line 7 of claim 1. If they are the same, it should be "said ground".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagumo et al. (US 6,433,745 B1), hereinafter "Nagumo".

Regarding claim 1, Nagumo discloses, in Figure 4, antenna for wireless communication devices comprising a dielectric substrate (2) with two pairs of metallic resonator structures provided on its surface each pair of resonator structures comprising a first resonator structure (20, 21) connected to a feed line (5), and a second resonator structure (8, 9) having a connection to ground (6), the first and the second resonator structure being electrically isolated from each other and being arranged adjacent to each other.

Regarding claim 2, as applied to claim 1, Nagumo discloses, in Figure 4, wherein the first and second resonator structures are elongated structures.

Regarding claim 3, as applied to claim 1, Nagumo discloses, in Figure 4, wherein the antenna has a single connection to ground which branches into the second resonator structures.

Regarding claim 4, as applied to claim 2, Nagumo discloses, in Figure 4, wherein the length of the second resonator structures measured from the point of branching is different.

Regarding claim 5, as applied to claim 1, Nagumo discloses, in Figure 1, wherein at least one of the first or second resonator structures is connected to one or more passive components (13).

Regarding claim 8, Nagumo discloses, in Figure 6, wherein the mobile communication device comprises said antenna of claim 1.

Regarding claim 9, as applied to claim 8, Nagumo discloses wherein the mobile communication device being designed as a transponder for radio frequency identification (RFID) purposes is an intended use.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagumo et al. (US 6,433,745 B1), hereinafter "Nagumo '745".

Regarding claim 6 and 7, Nagumo discloses every feature of claimed invention as expressly recited in claim 1, except for the first pair of resonator structures having a resonance frequency substantially in a frequency range of 824 MHz to 960 MHz and the second pair of resonator structures having a resonance frequency substantially in a frequency range of 1710 MHz to 1990 MHz.

However, such differences are not of patentable merits since electrical lengths of the resonator structures can determine using wavelength formula λ (meter) = $300/f$ (MHz), wherein λ is wavelength in meter and f is frequency in MHz, to obtain the desired frequency ranges to use in various application. Therefore, to employ having the first pair of resonator structures having a resonance frequency substantially in a frequency range of 824 MHz to 960 MHz and the second pair of resonator structures having a resonance frequency substantially in a frequency range of 1710 MHz to 1990 MHz upon a particular application or environment use would have been deemed obvious design choice to a person skilled in the art of antenna.

Inquiry

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu Hien T. Duong whose telephone number is 571-272-8980. The examiner can normally be reached on Monday - Friday, from 8:30AM-5:00PM.

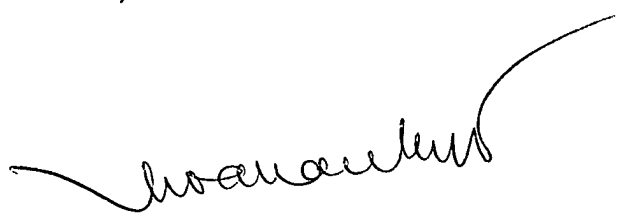
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/589,838
Art Unit: 2821

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/25/07
DD
Art Unit 2821



Hoanganh Le
Primary Examiner